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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,249	06/25/2003	Gregory A. Merkel	SP03-071	4924
22928	7590	10/05/2005		
CORNING INCORPORATED			EXAMINER	
SP-TI-3-1			GREENE, JASON M	
CORNING, NY 14831			ART UNIT	PAPER NUMBER

1724

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/607,249	Applicant(s) MERKEL ET AL.	
	Examiner Jason M. Greene	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 74-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 74-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/6/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Drawings

1. The drawings were received on 6 July 2005. These drawings are acceptable.

Response to Arguments

2. Applicant's arguments, see page 4, lines 11-17, filed 6 July 2005, with respect to the objections to claims 15-19 (reintroduced as claims 74-78) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Merkel '198.

3. The indicated allowability of claims 15-19 (reintroduced as claims 74-78) is withdrawn in view of the newly discovered reference(s) to Merkel (U.S. Patent 6,864,198 B2).

Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 74-78 are rejected under 35 U.S.C. 102(e) as being anticipated by Merkel '198 (U.S. Patent 6,864,198 B2).

The applied reference has a common assignee and a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With regard to claims 74 and 75, Merkel '198 discloses a diesel particulate filter comprising a plugged wall-flow honeycomb ceramic body composed of cordierite and having a plurality of parallel end-plugged cell channels traversing the body from a frontal inlet end to an outlet end thereof, wherein the filter exhibits a CTE (25-800 °C) of

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($8.1 \times 10^{-7} \text{ } ^\circ\text{C}$, a bulk filter density of 0.489 g/cm^3 , a median pore diameter d_{50} of $9.69 \text{ }\mu\text{m}$, a porosity of 62.51% and pore size distribution such that $P_m(P_f) = 2.85$, wherein d_{10} and d_{90} are pore diameters at 10% and 90% of the pore size distribution on a volumetric basis, and $d_{10} < d_{50} < d_{90}$ in Example 2 of Table 3 in columns 11 and 12 and col. 1, line 65 to col. 3, line 55.

With regard to the bulk filter density, Merkel '198 teaches the honeycomb filter of Example 2 having a wall thickness of 0.0155 (0.0292 cm) and a cell number of 182 cells per inch² (28.2 cells per cm²) in Table 3. From the cell number, the number of cell walls per square cm can be calculated as $2 * (28.2 \text{ cells per cm}^2)^{1/2} = 10.62$. As was noted in the previous Office action, cordierite has a specific gravity of 2.52 g/cm^3 . From the specific gravity of cordierite and the porosity, the density can be calculated as $10.62 \text{ cell walls/cm}^2 * 0.0292 \text{ cm} * 1 \text{ cm length} * 2.52 \text{ g/cm}^3 * 62.51\% \text{ porosity} = 0.489 \text{ g/cm}^3$, which is less than 0.60 g/cm^3 .

With regard to claims 76-78, Merkel '198 discloses a diesel particulate filter comprising a plugged wall-flow honeycomb ceramic body composed of cordierite and having a plurality of parallel end-plugged cell channels traversing the body from a frontal inlet end to an outlet end thereof, wherein the filter exhibits a CTE ($25\text{-}800 \text{ } ^\circ\text{C}$) of ($8.1 \times 10^{-7} \text{ } ^\circ\text{C}$, a bulk filter density of 0.489 g/cm^3 , a median pore diameter d_{50} of $9.69 \text{ }\mu\text{m}$, a porosity of 62.51% and pore size distribution such that $P_m(P_f) = 2.85$, wherein d_{10} and d_{90} are pore diameters at 10% and 90% of the pore size distribution on a volumetric

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basis, and $d_{10} < d_{50} < d_{90}$ and wherein d_{90} is 16.35 μm in Example 2 of Table 3 in columns 11 and 12 and col. 1, line 65 to col. 3, line 55.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Greene
Examiner
Art Unit 1724



jmg
October 2, 2005

DUANE SMITH
PRIMARY EXAMINER

D-4
10-3-05